Growing the Digital Business: Spotlight on Mobile Apps

Accenture Mobility Research 2015

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Introduction

In the past five years, companies have spent considerable time, money and attention developing mobile apps that help them engage and connect with their customers, as well as improve the efficiency and productivity of their employees.

As mobility continues to evolve, it has become critical to helping companies use the full range of digital technologies to boost overall operating and financial performance.

This much is evident in the Accenture Mobility Research study, which annually provides insights on trends in how companies are using digital and mobile technologies. One of the focus areas of our research this year was mobile apps, which are a portal to opening up a digital business and driving results. Mobile apps act as an interface to data that is being collected and delivered to users in an insightful and usable way. Without apps, much of the benefit of digital technologies and the Internet of Things – such as gathering performance data from sensors, applying analytics to that data, and using the insights to drive business decisions – will be lost. Our analysis of the survey results uncovered a number of intriguing findings about executives' perceptions of mobile apps, as well as companies' experiences with developing and maintaining them. Highlights of those findings are as follows:

- Executives overwhelmingly agree on the importance of mobile apps as a portal to the value of digital technologies and to a company's ability to become a digital business. They similarly see mobile apps as the dominant interface of the future, and believe there is high demand for mobile apps among their customers to access services.

- However, within the enterprise, app adoption is far from widespread. The most pervasive types of apps—productivity, operational, management and customer facing—were reported as being currently deployed by just slightly more than four in 10 executives.

- Many companies have yet to put in place measures that facilitate app effectiveness—such as comprehensive pre-launch testing, mobile security solutions that are integrated with existing enterprise security systems, and an intuitive user interface that enhances the user experience. Security issues were highlighted as the overriding challenge in app development and management.

- Companies that are more profitable than their competitors are more likely to use all of the types of mobile apps and post-implementation app services covered in our survey, as well as have a wide range of measures in place to facilitate app adoption.

This year's study is based on a combination of online and telephone interviews, conducted in December 2014 and January 2015, with 1,925 senior decision makers for digital strategy and technologies. Participating companies represented 15 countries and nine industries, and more than 85 percent had revenues of greater than $1 billion.

Executives Widely Acknowledge the Importance of Mobile Apps
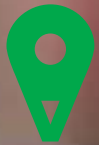
Executives in our survey consider mobile apps to be critical to their business, especially in light of their company's increasing push to adopt digital technologies.

For instance, they overwhelmingly believe mobile apps can help drive their company's digital transformation. Eighty-seven percent said mobile apps are necessary to fully realize the benefits of digital technologies and that mobile apps act as the portal to behaving as a digital business. Eighty-two percent think enterprise mobile apps are an integral part of their organization. And 81 percent believe mobile apps are key to unlocking vital data from across their business.

Executives also equally agree on the need for mobile apps to enhance customer engagement. Indeed, 87 percent said there is high demand among their customers for effective mobile apps that can help them access the company's services. Furthermore, mobile apps will grow in importance over time and, according to 85 percent of survey participants, will be the dominant interface of the future.

From an industry perspective, there was only a 10 percent gap between executives representing retailers and utilities, who were the most enthusiastic about the role of mobile apps in realizing the benefits of digital technologies, and those in the energy industry, of whom 80 percent agreed apps are necessary (Figure 2). Geographically, we found a slightly broader divide, but one that still demonstrates a majority of support for mobile apps, as shown

by almost all executives in China, where we saw the strongest support for mobile apps as part of a move to digital, and Australia, where just over three quarters agreed on the importance of apps' impact (Figure 1).

Figure 1: Apps are necessary to fully realize the benefits of digital technology (percentage of executives agreeing – by geography)

Canada 87%

US 84%

UK 83%

Germany 83%

France 82%

Spain 88%

Japan 93%

China 97%

Thailand 90%

Philippines 94%

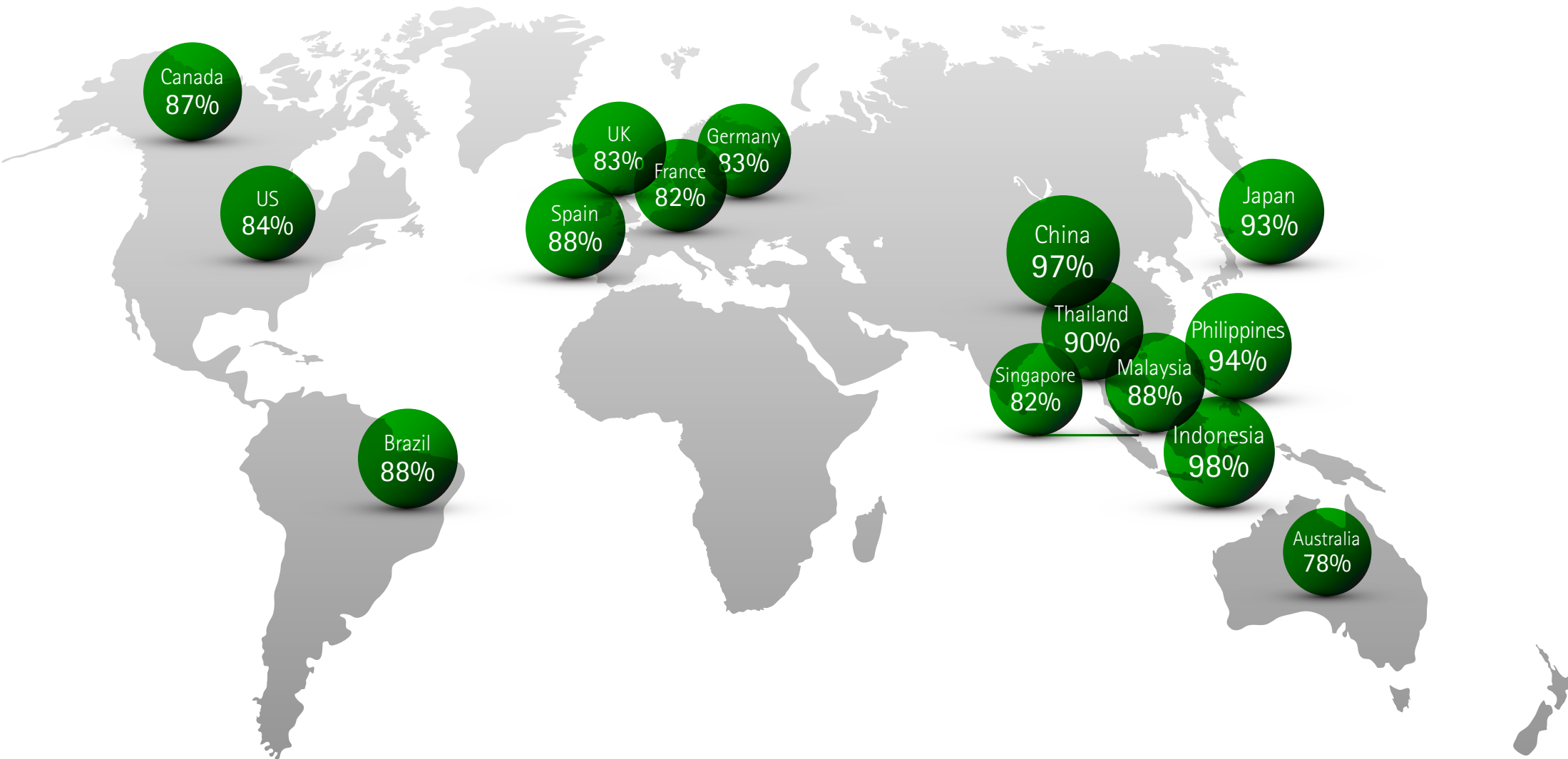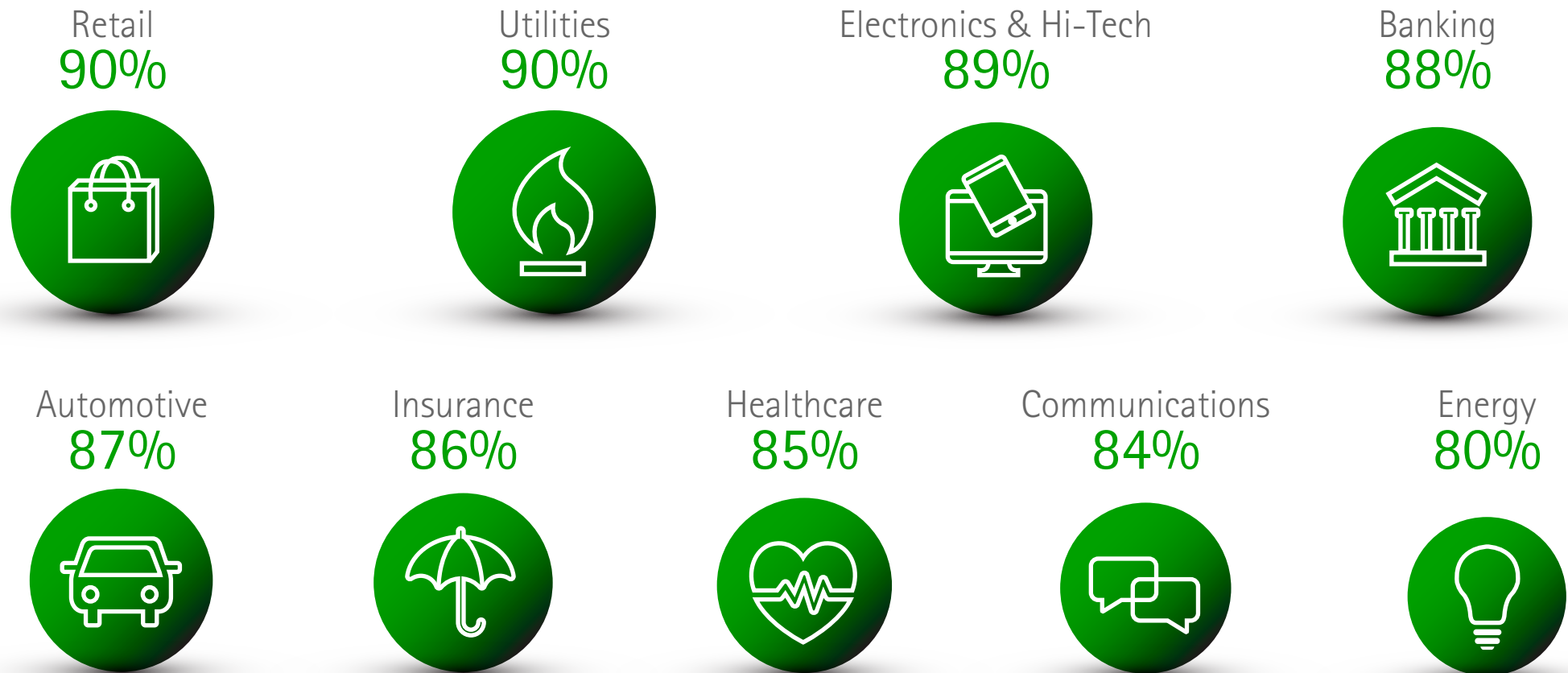Singapore 82%

Malaysia 88%

Brazil 88%

Indonesia 98%

Australia 78%

Figure 2: Apps are necessary to fully realize the benefits of digital technology (percentage of executives agreeing – by industry)

Retail
90%

Utilities
90%

Electronics & Hi-Tech
89%

Banking
88%

Automotive
87%

Insurance
86%

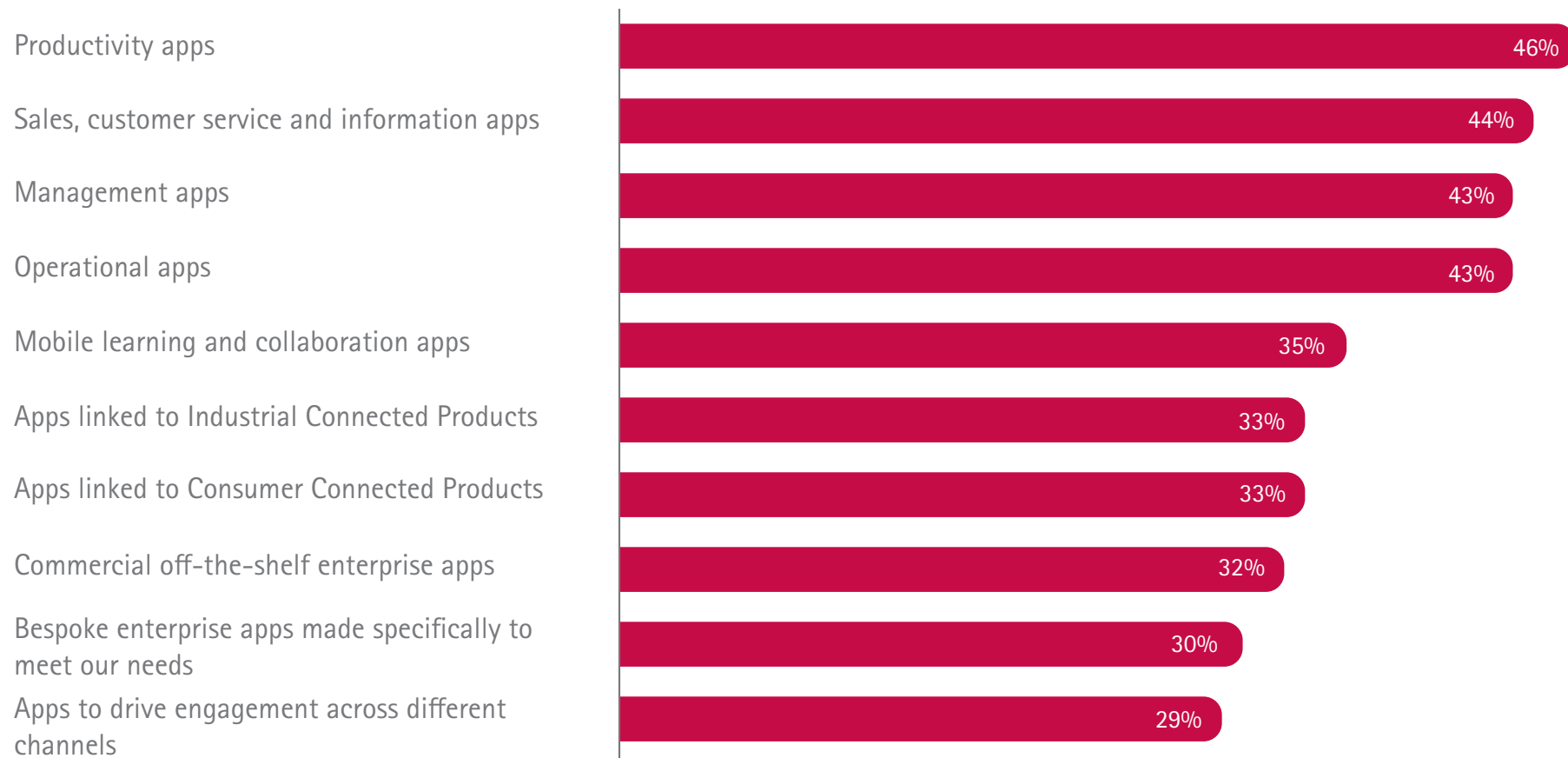Healthcare
85%

Communications
84%

Energy
80%

Multiple Challenges Are Suppressing App Adoption

However, despite the overall enthusiasm for mobile apps, widespread adoption and use of apps within the enterprise has yet to occur. In fact, of the 10 types of apps we asked about in our survey, none was reported in use currently by a majority of executives (Figure 3).

Figure 3: Types of mobile apps currently used

Type	Percentage
Productivity apps	46%
Sales, customer service and information apps	44%
Management apps	43%
Operational apps	43%
Mobile learning and collaboration apps	35%
Apps linked to Industrial Connected Products	33%
Apps linked to Consumer Connected Products	33%
Commercial off-the-shelf enterprise apps	32%
Bespoke enterprise apps made specifically to meet our needs	30%
Apps to drive engagement across different channels	29%

The most pervasive apps focused on productivity (such as those that enable report updates or access to sales data); operations (for instance, those that allow employees to complete time sheets or book office space); management (such as executive dashboards); and customer-facing apps (such as those that support sales or customer service).

Consistent with their strong enthusiasm for mobile apps, executives in China were much more likely than their counterparts in other countries to report their companies are currently using the full range of app types we asked about.

At the other end of the spectrum was France, where executives were generally least likely to say they had deployed these apps.

One possible reason mobile apps aren't more pervasive in the enterprise is that many companies have yet to put in place measures that facilitate successful adoption. For example, according to executives surveyed, the crucial steps to fostering greater uptake of both consumer-facing and enterprise mobile apps are reliable and consistent performance, security of enterprise data used or accessed, and a positive user experience (Figure 4).

However, only 52 percent said their companies have a comprehensive testing program before launch (that includes real user feedback) to help ensure apps work reliably and consistently (Figure 5). Just 54 percent indicated they have mobile security solutions that are integrated with existing enterprise security systems. Furthermore, only 56 percent said their apps have an intuitive user interface that enhances the user experience. This means nearly half of executives feel their company's user interface is substandard, which could be damping user adoption.

A variety of challenges companies experience in building and managing apps also may be hindering adoption (Figure 6).

Figure 4: Crucial steps for successful mobile application adoption

Reliability/consistent performance	43%
Security of enterprise data used/accessed	42%
A positive user experience	41%
Access to real-time data from/to the cloud	38%
A comprehensive testing program	36%
Apps are optimized for use across multiple mobile form factors	36%
Regular updates to functionality	35%
Feedback mechanisms	33%
Accessibility through a public app store	30%
Offline accessibility and functionality	30%

Figure 5: Key measures to make the most of applications, in place or planned

Measure	Have in place	Plan to have
Regular updates to functionality	58%	32%
An intuitive user interface	56%	36%
Mobile security that is integrated with existing enterprise security	54%	35%
Ability to exchange real-time data via cloud	54%	35%
A comprehensive testing program including real user feedback	52%	39%
Ongoing feedback mechanisms	51%	39%
Integration with enterprise's back-end systems	48%	42%
Offline accessibility and functionality	48%	39%
Designing mobile apps for desktop business applications	48%	42%
Accessiblity through an enterprise app store	46%	41%

Have in place
Plan to have

Figure 6: Main challenges faced when developing and managing mobile apps

Challenge	Percentage
Security issues	49%
Performance issues (crashes and bugs)	37%
Operational issues (difficulty building and updating apps efficiently)	33%
Fragmented nature of mobile (multiple device types and operating systems)	31%
Integration issues with back-end systems	30%
Lack of internal skills	27%
Monetization issues (difficulty hitting ROI targets)	26%
Discoverability issues (lack of traction/adoption of apps)	26%
API management	23%
Lack of usage data	22%
Developer ecosystems	22%
Inability to keep pace with operating system updates	22%

As with digital technologies in general, security remains executives' overriding concern—cited by just under half. Also seen as challenges, by about three in 10 executives, were performance issues (such as crashes and bugs); operational issues (including difficulty building and updating apps efficiently); the fragmented nature of mobile (i.e., the multiple device types and operating systems apps must work with); and integration issues with back-end systems.

Two executives we interviewed summed up the primary issues many companies experience. "Mobile apps help us improve the quality of our services but the main challenge is updates," explained the director at a utilities company in the United Kingdom. "Some of our equipment is an older generation and some is new, so the synchronization of updates becomes challenging." For a manager at an insurance services company in France, "the challenge we have is security as well as the interface with our existing information systems and database."
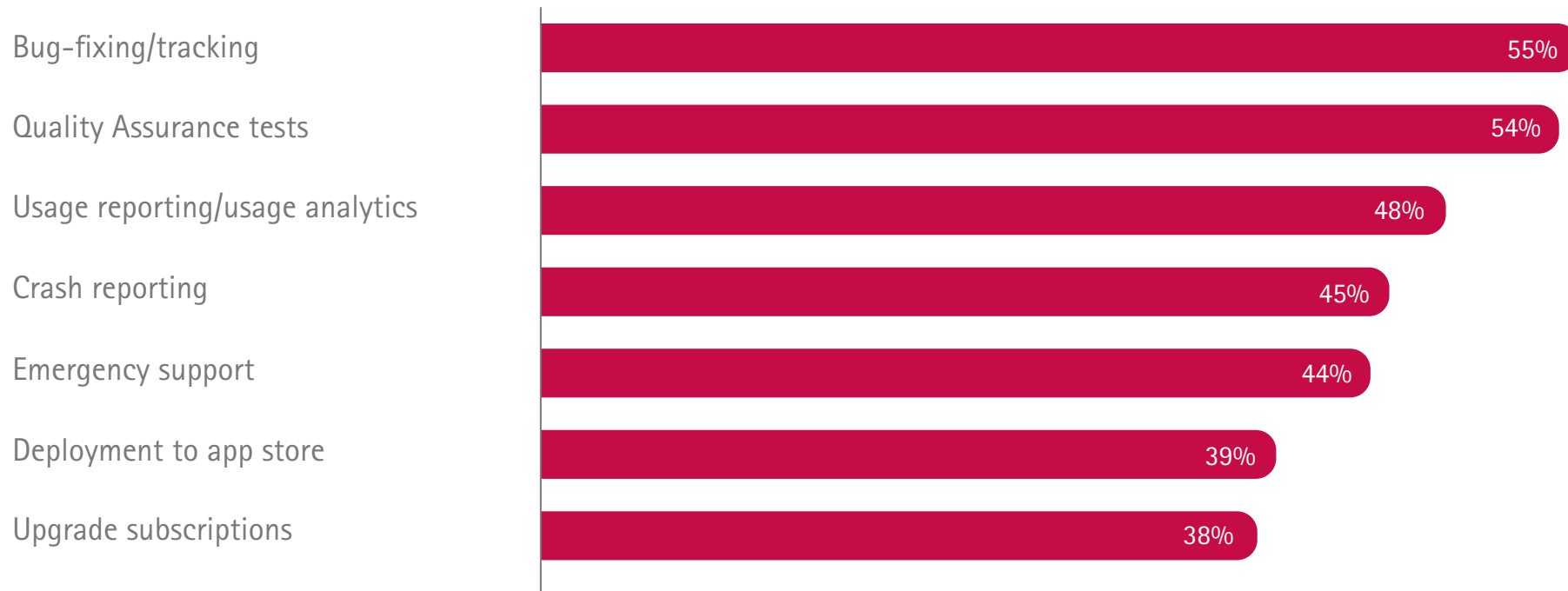
Given the main challenges executives cited, it's perhaps not surprising that of the principal post-implementation apps services, those most likely to be used by participating companies focus on bug fixing/tracking and Quality Assurance testing (Figure 7).

Challenges and shortcomings notwithstanding, executives remain convinced of the importance of mobile apps and see their use poised to increase. In fact, between 30 percent and 40 percent of executives globally indicated plans to adopt all types of apps within the next two years.

Anticipated future adoption of apps is strongest among companies in China by far, as well as those in the electronics and high-tech industry.

Figure 7: Post-implementation app services used

Service	Percentage
Bug-fixing/tracking	55%
Quality Assurance tests	54%
Usage reporting/usage analytics	48%
Crash reporting	45%
Emergency support	44%
Deployment to app store	39%
Upgrade subscriptions	38%

The Link With Profitability

One of the most interesting findings of our research is the correlation between a company's profitability (relative to competitors in its industry) and its approach to and perspectives on mobile apps.

We compared the responses by executives who described their company's profitability as "better than competitors" with those citing profitability as "worse than competitors." Both groups tended to be similar in their view of mobile apps as key to digital transformation—with the former slightly more likely to believe in mobile apps' importance.

But the two groups differed much more distinctly in several important areas. For instance, companies with self-described better profitability were more likely to currently use all of the types of mobile apps we asked about (Figure 8), as well as all of the post-implementation app services covered in our survey (especially, Quality Assurance testing and bug fixing/tracking).

More-profitable companies were also more likely to not only believe a wider range of factors are crucial to the success of mobile app adoption within the enterprise (Figure 9), but also to have all the measures in place we asked about that help make the most of mobile apps—most notably, an intuitive user interface, ongoing feedback mechanisms, and mobile apps designed for existing desktop applications.

Conversely, those describing their profitability as worse than competitors viewed apps more negatively. They were more likely to believe mobile apps offer little business benefit (64 percent versus 47 percent) and that mobile apps cannot be appropriately secured for business purposes (61 percent versus 45 percent).

While these results do not establish causality—i.e., that greater use of mobile apps directly improves profitability—they do suggest that there is a link between a more positive, comprehensive approach toward mobile apps and more profitable operations.

Figure 8: Types of mobile apps currently used differed by company profitability relative to competitors
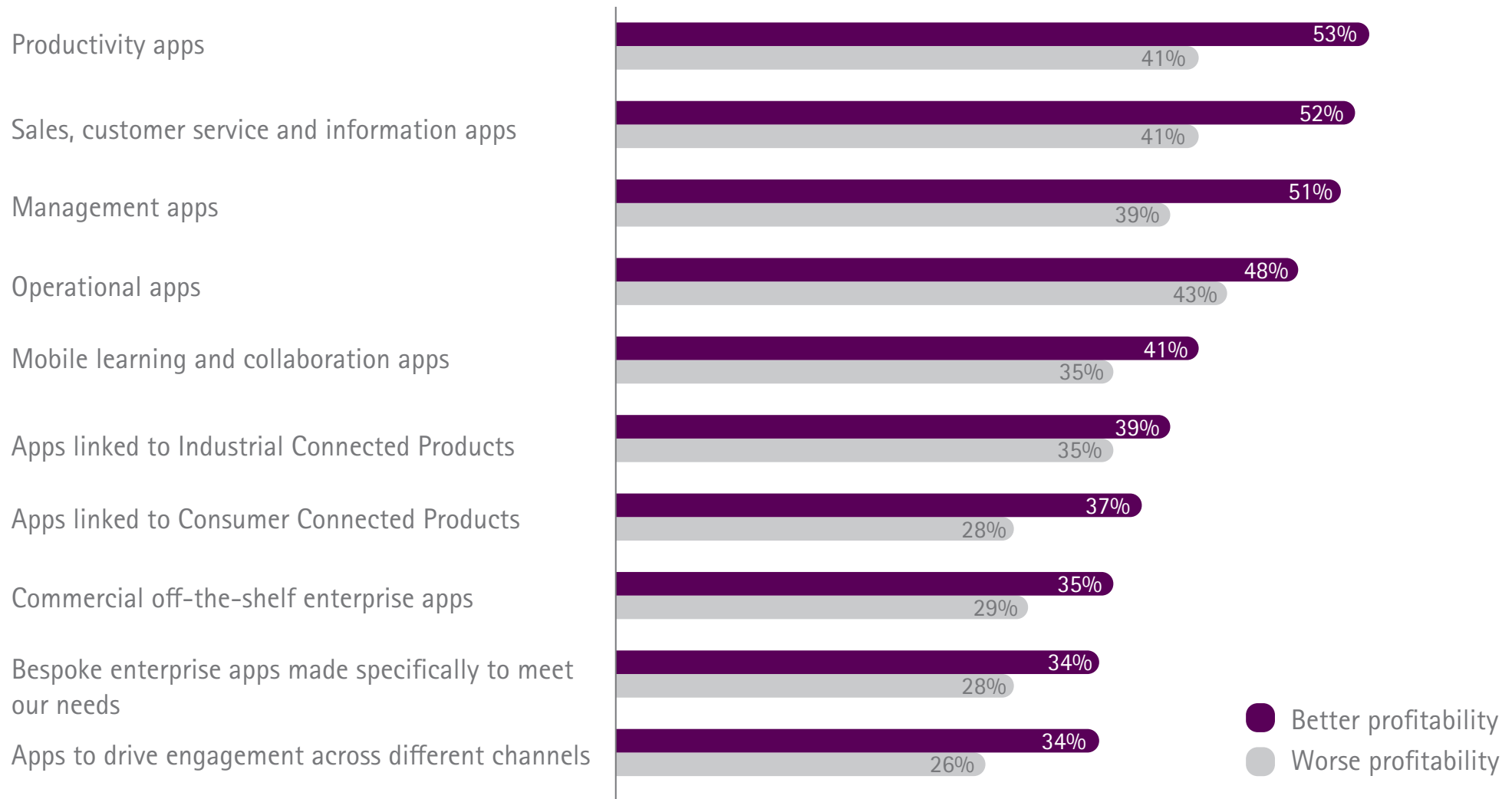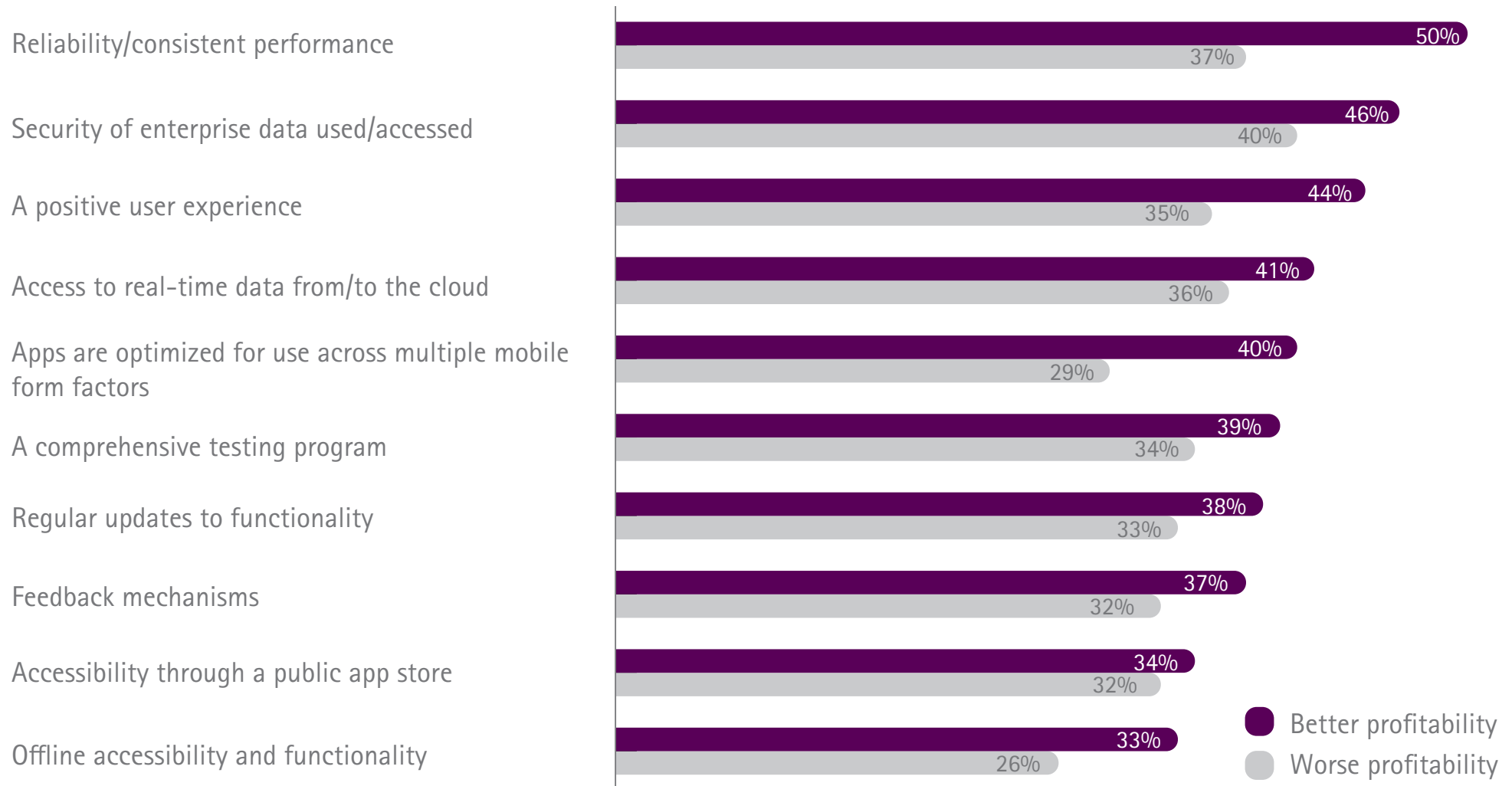
App type	Better profitability	Worse profitability
Productivity apps	53%	41%
Sales, customer service and information apps	52%	41%
Management apps	51%	39%
Operational apps	48%	43%
Mobile learning and collaboration apps	41%	35%
Apps linked to Industrial Connected Products	39%	35%
Apps linked to Consumer Connected Products	37%	28%
Commercial off-the-shelf enterprise apps	35%	29%
Bespoke enterprise apps made specifically to meet our needs	34%	28%
Apps to drive engagement across different channels	34%	26%

● Better profitability
● Worse profitability

Figure 9: Crucial steps for successful mobile application adoption differed by company profitability relative to competitors

	Better profitability	Worse profitability
Reliability/consistent performance	50%	37%
Security of enterprise data used/accessed	46%	40%
A positive user experience	44%	35%
Access to real-time data from/to the cloud	41%	36%
Apps are optimized for use across multiple mobile form factors	40%	29%
A comprehensive testing program	39%	34%
Regular updates to functionality	38%	33%
Feedback mechanisms	37%	32%
Accessibility through a public app store	34%	32%
Offline accessibility and functionality	33%	26%

● Better profitability
● Worse profitability

Advice for the Road Ahead

While our survey clearly conveys companies' enthusiasm about mobile apps and belief in their importance to generating the most value from a digital business, it also shows that most still struggle to develop and implement them effectively—especially apps geared toward boosting enterprise performance.

Thus, as they continue on their journey toward becoming a digital business, companies should keep in mind four key guidelines that, in our experience, can enhance the business value that companies' apps—as well as their broader mobile initiatives—can generate.

Create a robust mobile strategy as the first order of business

- Companies must develop a comprehensive mobile strategy that focuses on a clear business objective, and forms part of an enterprise's broader IT infrastructure strategy.

- Underpinning this strategy should be a clear articulation of the functional and technical competencies that are required to enable and sustain an effective suite of applications.

- This comprehensive framework must encompass the complete lifecycle of apps, spanning network and security, integration and architecture, and development and management, including the capability to be agile in updating apps on a regular basis in response to usage patterns and technology changes.

- Harnessing the transformative power of mobility is key to ongoing growth and competitiveness; building a new app every few years will not be enough – it is better to be prepared to make small, regular updates to maintain the app's user experience and value.

Understand what changes are needed to enhance data accessibility and usability

- One of the biggest benefits apps deliver is easier, more user friendly and faster access to data, becoming a vital link in the "data supply chain."

- To unlock the value of data, companies have to find ways to let it be easily accessed as part of this supply chain, flowing easily and usefully through the entire organization, and eventually throughout the organization's ecosystem of partners as well.

- To help apps make this data easy to access, companies may need to re-architect the way data travels, capturing and making it available in such a way as drives business value.

Treat security as ongoing priority in app development and management

- Executives highlighted security as the primary challenge in app development and management, but many apply it to mobile applications as a stand-alone afterthought, which can degrade an app's performance and reduce its benefits to the business.

- Security of apps should be integrated into the mobility strategy as an integral element of lifecycle management, and treated as an extension of the enterprise's wider IT security measures. This will have the added benefit of being familiar for employees and so easier to use.

- Education is a vital element of a secure mobile app program, with employees reminded to only use trusted app stores for the download of apps, as part of a broader instillation of a "secure culture" in an organization that recognizes and responds to risk.

Constantly monitor and adapt for a better experience

- Once apps have been developed, thoroughly tested and rolled out, it is vital to have an application management program in place to catch and quickly rectify any performance issues, bugs, or pain points in the user experience to avoid abandonment.

- It is important to be prepared and agile enough to make changes based on what the analysis is showing. If people abandon a process at a particular point within the app, it should be tweaked to improve that process, and ultimately keep that user.

- Companies must also be prepared for fairly regular mobile operating system upgrades and patches regardless of the platforms used, scheduling necessary app updates and educating users to ensure they are widely accepted.

- Think outside the app: By leveraging data about consumers, products and features, enterprises can improve app functionality and as a result, the consumer experience. For example, by listening to what consumers say about a specific product or feature of an app on social media, enterprises can 'push' offers or insights that are relevant to the consumer, in the right context.

- By monitoring applications continuously for usage analytics, real-time performance, and crash analytics, enterprises can address consumer complaints proactively, plan subsequent feature updates and/or defect fixes, and create the optimal experience based on usage pattern analysis.

Regardless of where a company finds itself on the mobile spectrum—just starting out by launching enabling enterprise apps, transforming existing key business processes with mobile capabilities, or somewhere in between—it will have to invest appropriately and partner where necessary technical capabilities are not available in-house. And in some industries, the scale of investment required to achieve desired results is much greater than in others. But for companies that get mobile right, the return on that investment in the form of greater growth, profitability, and competitiveness will be significant.
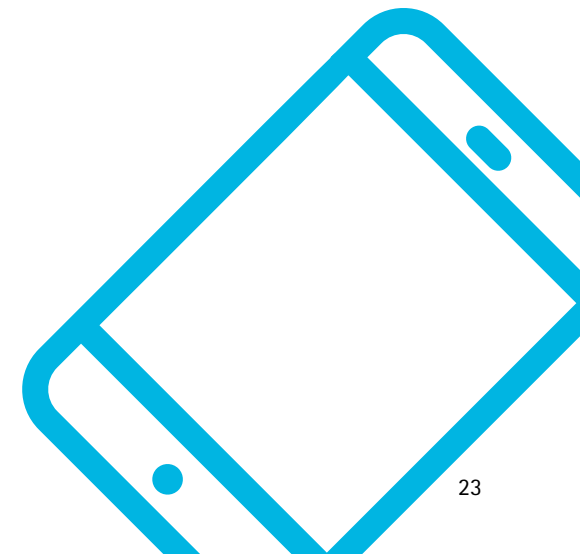
Acknowledgements

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